

WE CLAIM:

1. A method for maintaining a boot order of one or more mass storage devices within a computer system, the method comprising:

determining prior to attempting an initial program load of the computer system whether a configuration change to the computer system was made since a previous boot of the computer system that would effect the boot order of the mass storage devices within the computer system; and

in response to determining that a configuration change was made that would effect the boot order, rearranging the boot order of the mass storage devices so that the mass storage devices are booted in the order used prior to the configuration change.

2. The method of Claim 1, wherein the configuration change comprises removing a one of the one or more mass storage devices from the computer system and wherein rearranging the boot order of the mass storage devices comprises removing the removed mass storage device from the boot order.

3. The method of Claim 2, wherein the configuration change comprises adding a mass storage device to the computer system and wherein rearranging the boot order of the mass storage devices comprises placing the added mass storage device at the end of the boot order.

4. The method of Claim 3, further comprising in response to determining that a configuration change was made that would effect the boot order:

storing a data structure in a non volatile memory of the computer system prior to performing a boot of the computer, the data structure including a unique identifier for each mass storage device and the location of each mass storage device within the rearranged boot order.

5. The method of Claim 4, wherein rearranging the boot order of the mass storage devices comprises:

identifying a previous location in the boot order for each mass storage device in the computer system by locating a unique identifier in the previously stored data structure matching the mass storage device; and

rearranging the location in the current boot order for each mass storage device so that each device retains the same relative position in the boot order as the previous location.

6. A computer-readable medium having computer-executable instructions stored thereon, said instructions operative to provide the method of Claim 1 when executed by a computer.

7. A computer-controlled apparatus operative to perform the method of Claim 1.

8. A method for maintaining a boot order that defines the order in which a computer system attempts to perform an initial program load from one or more mass storage devices within the computer system, the method comprising:

identifying each mass storage device currently in the system that was also installed at a previous boot of the system;

determining the location of each mass storage device currently in the system in a boot order used during the previous boot by utilizing data stored at the previous boot;

arranging a current boot priority for each device currently in the system that was also installed at the previous boot so that the mass storage devices currently in the system are in the same order as they were during the previous boot;

identifying each device currently in the system that was not installed at the previous boot based on the data stored at the previous boot; and

assigning a boot priority to each mass storage device currently in the system that was not installed at the previous boot at the end of the boot order.

9. The method of Claim 8, wherein the data stored at the previous boot comprises data that uniquely identifies each mass storage device and provides the boot priority of each mass storage device in the previous boot order.

10. The method of Claim 9, wherein the data stored at the previous boot is stored in a non-volatile memory of the computer system after the current boot order has been determined.

11. A computer-readable medium having computer-executable instructions stored thereon, said instructions operative to provide the method of Claim 8 when executed by a computer.

12. A computer-controlled apparatus operative to perform the method of Claim 8.

13. A computer system operative to attempt an initial program load from one or mass storage devices according to a defined boot order, the computer system comprising:

a central processing unit;

the one or more mass storage devices;

a non-volatile memory storing a basic input/output system (BIOS) executable on the central processing unit, the BIOS operative to provide a facility for specifying the boot order, to determining prior to attempting an initial program load of the computer system whether a configuration change to the computer system was made since a previous boot of the computer system that would effect the boot order, and, in response to determining that a configuration change was made that would effect the boot order, to rearrange the boot order of the mass storage devices so that the mass storage devices are booted in the order used prior to the configuration change.

14. The computer system of Claim 13, wherein the BIOS is further operative to store data in the non volatile memory, the data including a unique identifier for each

mass storage device and the location of each mass storage device within the rearranged boot order.

15. The computer system of Claim 14, wherein the BIOS is operative to store the data in the non-volatile memory prior to a boot of the computer system.

16. The computer system of Claim 15, wherein rearranging the boot order of the mass storage devices comprises:

identifying a previous location in the boot order for each mass storage device in the computer system by locating a unique identifier in the previously stored data matching the mass storage device; and

rearranging the location in the current boot order for each mass storage device so that each device retains the same relative position in the boot order as the previous location.